

Abstract Submitted
for the DNP08 Meeting of
The American Physical Society

The Daya Bay Calibration System: Key to θ_{13} JIANGLAI LIU, California Institute of Technology, DAYA BAY COLLABORATION — θ_{13} , the only presently unknown neutrino mixing angle, can be measured via the disappearance of electron anti-neutrinos from nuclear reactors. Using this approach, the Daya Bay experiment aims to measure θ_{13} with an unprecedented sensitivity of $\sin^2(2\theta_{13}) < 0.01$. To reach the desired sensitivity, the detector properties need to be understood thoroughly, and a comprehensive calibration program is a must. In this talk, I will present the calibration system that is currently under construction, and discuss important detector-related systematics that can be controlled/reduced by the calibration program. I will tie these back into the sensitivity to θ_{13} at the end of the talk.

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Date submitted: 30 Jun 2008

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